

RIC 2004

New Reactors/Advanced Reactors

Session W7

Department of Energy Initiatives Supporting COL Applications

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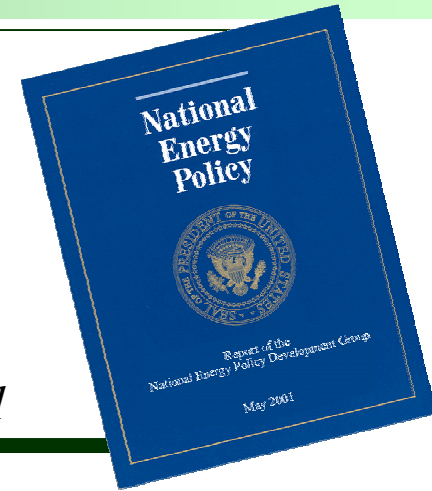




The U.S. National Energy Policy and Nuclear Power

“The NEPD Group recommends that the President support the expansion of nuclear energy in the United States as a major component of our national energy policy.”

Report of the National Energy Policy Development Group, May 2001



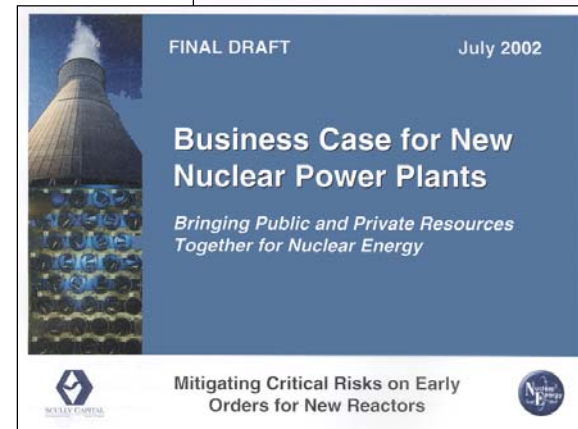
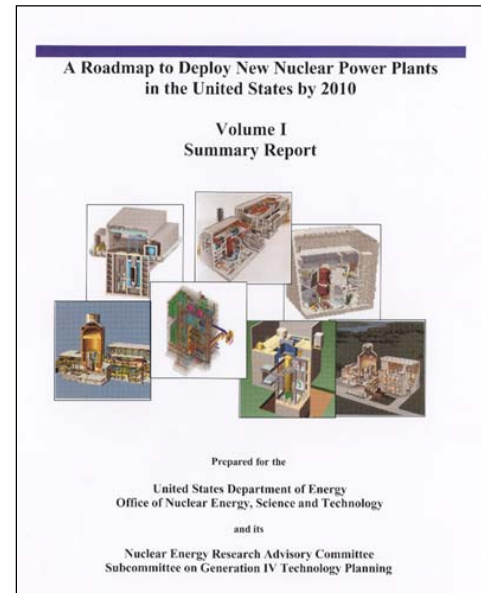
Selected Recommendations:

- Support uprating and relicensing existing nuclear power plants
- Support licensing new nuclear reactors
- Develop advanced nuclear fuel cycles and next generation technologies
- Reconsider advanced reprocessing and fuel treatment technologies



Barriers to New Nuclear Plants

- ◆ **Nuclear Waste Disposal**
- ◆ **Accident Indemnification**
- ◆ **Commissioning Uncertainty**
- ◆ **High Initial Capital Investment**
- ◆ **Economic Competitiveness**
 - Long construction durations
 - Deregulated market





Government Has Made Good Progress

Challenge

- ⌚ Establish Yucca Mountain Repository
- ⌚ Extend Price-Anderson
- ⌚ Support New Nuclear Reactors
- ⌚ Economic Competitiveness

Action

- President has signed House Joint Resolution 87 allowing DOE to seek a license for Yucca Mountain
- President signed Omnibus Bill to extend Price-Anderson coverage for an additional year, expect further extension in future energy legislation
- DOE has launched the Nuclear Power 2010 Initiative, working with industry
- Senate Energy Legislation proposed Production Tax Credits for first few nuclear plants



DOE Initiatives

Nuclear Power 2010

◆ “Early Site Permit” (ESP) Demonstration Projects initiated

- Three ESP applications filed for NRC approval
 - Dominion Energy - North Anna
 - Entergy - Grand Gulf
 - Exelon - Clinton
- TVA Site Suitability Study of new location on Bellefonte Site

◆ Generic Construction & Operating License (COL) project initiated -- EPRI/NEI

- Develop COL application preparation guidance
- Develop generic resolution of COL issues





DOE Initiatives

Nuclear Power 2010 (cont.)

◆ **New Nuclear Plant Licensing Demonstration Projects**

- Solicitation issued in November -- for proposals outlining a power company plan of activities leading to an order for and license to build a new nuclear power plant
 - Combined Construction and Operating License
 - Advanced Reactor Design Completion
 - Project Cost and Financial Analysis
 - Siting Analysis and Permits
- Pre-submission Briefing held on December 11, 2003
- Open Solicitation Period through December 2004